What is claimed is :

1. A metal seal of ring as a whole disposed between a first contact flat face portion and a second contact flat face portion, comprising a middle base portion, a first contact convex portion which contacts the first contact flat face portion, and a second contact convex portion which contacts the second contact flat face portion, in which the first contact convex portion is protruding from a position on an inner side of the middle base portion, the second contact convex portion is protruding from a position on an outer side of the middle base portion, and torsional elastic deformation turning around the middle base portion as a center is generated by pressing force from the first contact flat face portion and the second contact flat face portion in an attached and compressed state.

2. The metal seal as set forth in claim 1, wherein the middle base portion has an approximately rectangular cross section, and each of the first contact convex portion and the second contact convex portion has a half-circular or half-elliptical cross section.

3. The metal seal as set forth in claim 1 or claim 2, wherein the cross section of the middle base portion is approximately rectangular, a gap between an end face of the middle base portion from which the first contact convex portion is protruding and the first contact flat face portion is formed as a sloped face gradually increased toward the

outer side in an attached and uncompressed state. and a gap between an end face of the middle base portion from which the second contact convex portion is protruding and the second contact flat face portion is formed as a sloped face gradually increased toward the inner side in the attached and uncompressed state.

4. The metal seal as set forth in claim 1 or claim 2, wherein a restriction inner peripheral face is continued from the second contact flat face portion, which contacts a peripheral face of the second contact convex portion in the attached and compressed state, as the second contact convex portion contacts the second contact flat face portion on two positions in cross section.

5. An attachment method for metal seal in which a first contact convex portion is protruding from an inner side on one of both end faces in an axis direction of a metal seal of ring as a whole, a second contact convex portion is protruding from an outer side on the other of the both end faces, and the metal seal is disposed between a first contact flat face portion and a second contact flat face portion, comprising the steps of:

setting the metal seal in a first assembled state in which the first contact convex portion is corresponding to the first contact flat face portion; and

overturning the metal seal after a predetermined operation period to make a second assembled state in which the second contact convex

portion is corresponding to the first contact flat face portion.

6. A metal seal of ring as a whole disposed between a first contact flat face portion and a second contact flat face portion, comprising a middle base portion, a first contact convex portion which contacts the first contact flat face portion, and a second contact convex portion which contacts the second contact flat face portion, in which torsional elastic deformation turning around the middle base portion as a center is generated by pressing force from the first contact flat face portion and the second contact flat face portion in an attached and compressed state, and a first auxiliary protrusion, which contacts the first contact flat face portion to prevent excessive torsional elastic deformation when inner side pressure works, is disposed on the outer side.

7. A metal seal of ring as a whole disposed between a first contact flat face portion and a second contact flat face portion, comprising a middle base portion, a first contact convex portion which contacts the first contact flat face portion, and a second contact convex portion which contacts the second contact flat face portion, in which torsional elastic deformation turning around the middle base portion as a center is generated by pressing force from the first contact flat face portion and the second contact flat face portion in an attached and compressed state, a first auxiliary protrusion is disposed on the outer side and a second auxiliary protrusion is disposed on the inner side, and each of

the first auxiliary protrusion and the second auxiliary protrusion contacts the first contact flat face portion and the second contact flat face portion respectively to prevent excessive torsional elastic deformation when pressure works.

8. A metal seal of ring as a whole disposed between a first contact flat face portion and a second contact flat face portion, comprising a middle base portion, a first contact convex portion which contacts the first contact flat face portion, and a second contact convex portion which contacts the second contact flat face portion, in which torsional elastic deformation turning around the middle base portion as a center is generated by pressing force from the first contact flat face portion and the second contact flat face portion in an attached and compressed state, and a second auxiliary protrusion, which contacts the second contact flat face portion to prevent excessive torsional elastic deformation when outer side pressure works, is disposed on the inner side.

9. A tight-seal construction provided with a first contact flat face portion and a second contact flat face portion which are mutually parallel, and a metal seal of ring as a whole disposed between the first contact flat face portion and the second contact flat face portion, in which the metal seal has a middle base portion, a first contact convex portion which contacts the first contact flat face portion, and a second contact convex portion which contacts the second contact flat

face portion, the first contact convex portion is disposed on an inner side and the second contact convex portion is disposed on an outer side uncorrespondingly each other, torsional elastic deformation turning around the middle base portion as a center is generated in an attached and compressed state, and a protruding portion to contact the middle base portion is disposed on the first contact flat face portion or the second contact flat face portion as a moment is generated in the metal seal in an opposite direction of the torsional elastic deformation by fluid pressure in a pressure-receiving state in which the fluid pressure works.

10. The tight-seal construction as set forth in claim 9, wherein the metal seal is attached as to be pressed and held on 3 points of the first contact convex portion, the second contact convex portion, and a contact point of the protruding portion on the middle base portion, and not pressed on other than the 3 points in the pressure-receiving state and a non pressure-receiving state of the attached and compressed state.

11. A tight-seal construction provided with a first contact flat face portion and a second contact flat face portion which are mutually parallel, and a metal seal of ring as a whole disposed between the first contact flat face portion and the second contact flat face portion, in which the metal seal has a middle base portion, a first contact convex portion which contacts the first contact flat face portion, and a second contact convex portion which contacts the second contact flat

face portion, the first contact convex portion is disposed on an inner side and the second contact convex portion is disposed on an outer side uncorrespondingly each other, torsional elastic deformation turning around the middle base portion as a center is generated in an attached and compressed state, and, a pressing portion for another end, which presses another end opposite to an end portion on a pressure-receiving chamber side in the attached and compressed state, is disposed on a plane different from the first contact flat face portion and the second contact flat face portion.

12. The tight-seal construction as set forth in claim 11, wherein the pressing portion for another end is formed with a staged portion on the plane different from the first contact flat face portion and the second contact flat face portion.